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(54) **FILE ACCESS CONTROL IN A MULTI-PROTOCOL FILE SERVER**

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(*) Notice: This patent issued on a continued prosecution application filed under 37 CFR 1.53(d), and is subject to the twenty year patent term provisions of 35 U.S.C. 154(a)(2).

Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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(52) **U.S. Cl.** **713/201**; 714/38
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(57) **ABSTRACT**

The invention provides a method and system for enforcing file access control among client devices using multiple diverse access control models and multiple diverse file server protocols. A multi-protocol file server identifies each file with one particular access control model out of a plurality of possible models, and enforces that one particular model for all accesses to that file. When the file server receives a file server request for that file using a different access control model, the file server translates the access control limits for that file into no-less-restrictive limits in the different model. The file server restricts access by the client device using the translated access control limits. Each file is assigned the access control model of the user who created the file or who last set access control limits for the file. When a user having a different access control model sets access control limits, the access control model for the file is changed to the new model. Files are organized in a tree hierarchy, in which each tree is limited to one or more access control models (which can limit the ability of users to set access control limits for files in that tree). Each tree can be limited to NT-model-only format, Unix-model-only format, or mixed NT-or-Unix-models format.

60 Claims, 1 Drawing Sheet